

Distribution of Manufacturers' Sales

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THE importance of the various primary channels of distribution for manufactured goods has been disclosed by a new publication of the Bureau of the Census presenting data compiled in the 1935 Census of Business.¹ The factual data gathered in the survey deals with the first stage of distribution of manufactured goods which go directly to the following outlets: (1) Manufacturers' own wholesale branch, (2) industrial

ing plants amounted to 43.8 billion dollars. Of this amount 38.2 billion dollars, or 87.8 percent, represents sales through six channels of primary distribution.

For all industrial groups combined, the proportion of sales made through these principal channels in 1935 is presented in table 1. These have been grouped in the order of their importance. The portion of the total sales volume not distributed in the table (12.7 percent) consists of interplant transactions, exports invoiced direct from plants, and other sales not distributed through usual channels or not allocated. Considerable deviation from these over-all percentages is evident in the various lines of business, and the extent of these variations is developed in the statistical and graphic data assembled in this article.

Table 1.—Relative Importance of Channels of Primary Distribution for All Manufacturing Industries

Manufacturers sales to—	Percent of total 1935 sales
Industrial and other large users.....	24.6
Wholesalers and jobbers.....	28.2
Retailers of all types (including chain stores).....	19.3
Own wholesale branches.....	17.1
Household consumers.....	1.8
Other retail stores.....	1.8
Total.....	87.8

Source: Bureau of the Census, Census of Business 1935, Distribution of Manufacturers' Sales, p. 19.

From the data presented in table 2 it is evident that in most industrial groups, four types of outlets play an important role in distribution of manufacturers' goods. Figure 1 shows graphically the relative importance of the various major channels.

Two-Thirds of Plants Sell Exclusively Through One Channel.

Figure 2 shows the number of plants selling through various distribution channels. The bar in each instance indicates the number of plants using each type of outlet and the black portion represents the proportion of the plants which sell exclusively through this one channel. Thus, 52,743 manufacturing plants sold goods to retailers, and out of this number 22,740 plants or 43.1 percent used this means of distribution exclusively; 47,192 plants sold to wholesalers and jobbers and 42.6 percent of these establishments sold exclusively to this field, etc. Table 3 presents these data for each of the 16 industrial groups.

The extent of concentration of sales for all industries combined is shown in figure 3. About two-thirds of the manufacturing plants or 89,144 establishments sold goods exclusively through one channel. The lower portion of this chart shows the break-down of sales of plants selling exclusively through one channel, arranged

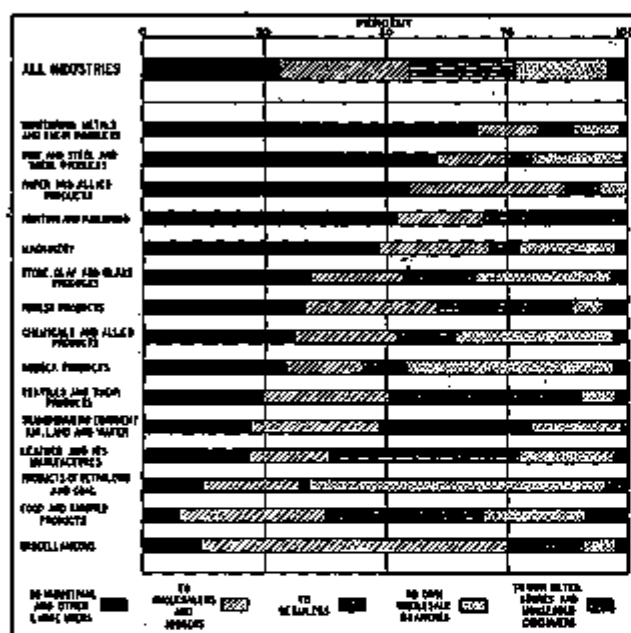


Figure 1.—Percentage Distribution of Manufacturers' Sales, by Primary Channels of Distribution, 1935

and other large users, (3) wholesalers and jobbers, (4) manufacturers' own retail stores, (5) retailers of all types, (6) household consumers, and (7) other plants in manufacturers' own organization. The report includes a comparative distribution of sales in 1929 and 1935, the number of manufacturers using each of these channels of primary distribution, and the number using any one channel exclusively in 1935.

This survey also shows, for the first time, the number of employees engaged in distribution activities and the cost of distribution incurred at manufacturing plants. Data are presented for each of 315 separate industries, as well as for the industry groups.²

Importance of Various Channels.

According to the survey, the sales volume in 1935, at f. o. b. factory prices, of 134,392 reporting manufactur-

¹ The material in this article is, in general, a summary of the data presented in the publication under this title "Distribution of Manufacturers' Sales", recently issued by the United States Department of Commerce, Bureau of the Census. Copies of this report may be obtained gratis by writing to that Bureau.

² Data were not compiled for 29 of the 337 industry classifications into which manufacturing activity is divided by the Census Bureau. A list of these industries and the reasons why such distribution was not made are given on pp. 17 and 18 of the publication noted above.

according to type of outlet used. Of all those plants using a single outlet, about one-fourth sold to industrial users and nearly the same percentage to retailers, while more than one-fifth of these manufacturers obtain their distribution through wholesalers and jobbers.

Shifts Between 1929 and 1935.

Table 4 is a comparison of the primary channels of distribution used in 1935 with those used in 1929 by industry groups.³ Comparable data are available for 91,688 plants, or 68.3 percent of the plants reporting. These plants had sales in 1935 of 26.3 billion dollars, or

facturers' sales to wholesalers and jobbers from 32 percent in 1929 to 27 percent in 1935, and the reduction of sales direct to industrial and other large users from 26 percent of the total in 1929 to 25 percent in 1935. Against these reductions in relative position it is shown that the proportion of sales to manufacturers' own wholesale branches increased from 18 percent in 1929 to 21 percent in 1935, while sales direct to retailer increased from 20 percent to 23 percent.

Distribution Expenses Surveyed.

The 1935 Census of Business provides for the first time data on distribution expense incurred at manu-

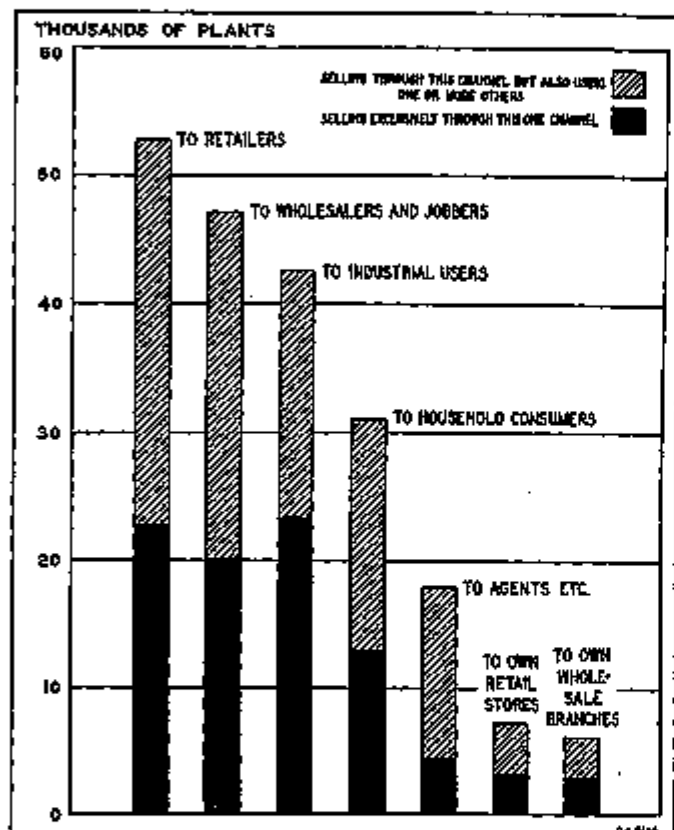


Figure 2.—Manufacturers' Sales—Number of Plants Selling Through Various Distribution Channels, 1935.

69 percent of total distributed sales. The data in table 4 as well as those for each of the 315 individual industries, disclose many changes in the relative importance of primary channels of distribution used by certain industries or groups of industries between the 2 years under discussion. While these changes are more important in some industries than others, it is apparent that there have been but few significant changes in the distribution methods of manufacturers as a whole. The outstanding changes for all industries combined were the decline in the proportion of manu-

³ Due to changes in the composition of the various industry groups between 1929 and 1935 and the lack of comparability as between years for certain industries, the data in table 3 are confined to 91,688 plants or 68.3 percent of total plants reporting. For further explanation see p. 15, Distribution of Manufacturers' Sales, Census of Business 1935, Bureau of the Census.

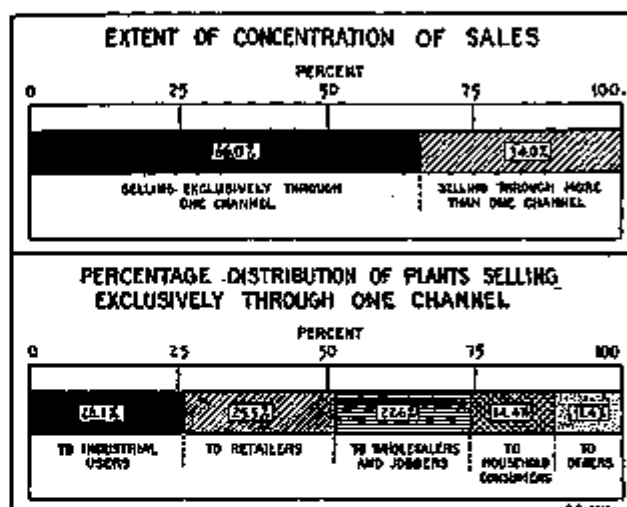


Figure 3.—Proportion of Manufacturers' Plants Selling Exclusively Through One Channel and Percentage Distribution of Such Plants, by Type of Channel, 1935.

facturing plants. This report shows the number of employees engaged in distribution activities, the pay roll of distribution employees, traveling expenses of salesmen, advertising, credit and collection expenses, bad debts, and the portion of such overhead expenses as rent, interest, and general administrative expense allocated to distribution.

In the collection of these distribution expense data many difficulties were encountered because there is no uniform classification for such expense common to industry, and some manufacturers did not have accounting systems which differentiated production costs from distribution costs. The result is that one plant may consider an item as a distribution expense while another plant may classify it as something else. As a result of this lack of uniformity among manufacturers in classifying and recording expense data, the accuracy of the figures given in the report cannot be warranted, and all expense data reported in the survey of Distribution of Manufacturers' Sales should be considered with these facts in mind. Distribution expense data as reported for the 16 industry groups should be considered in the light of general relationships and should not be used for specific comparisons with any of the 315 industrial classifications.

Table 2.—Summary of Primary Channels of Distribution by Industry Groups

Industry group	Total distributed sales		To own wholesale branches	To industrial and other large users	To wholesale and jobbers	To own retail stores	To retailers	To household consumers
	Thousands of dollars 38,212,859	Percent 100.0	Percent 19.8	Percent 28.1	Percent 26.5	Percent 1.7	Percent 22.0	Percent 2.1
All industries.....	38,212,859	100.0	19.8	28.1	26.5	1.7	22.0	2.1
Food and kindred products.....	9,456,868	100.0	21.2	7.5	30.7	3.3	32.8	4.5
Textiles and their products.....	5,323,427	100.0	7.5	24.0	28.4	1.3	39.8	1.2
Forest products.....	1,628,478	100.0	6.0	33.1	27.3	1.9	28.0	2.8
Paper and allied products.....	1,201,557	100.0	6.3	54.9	32.4	—	6.8	1.1
Printing and publishing.....	37,390	100.0	—	51.8	18.4	—	19.9	10.9
Chemicals and allied products.....	2,532,174	100.0	32.2	31.2	21.3	7	11.9	2.1
Products of petroleum and coal.....	1,831,104	100.0	61.1	12.8	19.7	4.8	2.2	1.4
Rubber products.....	655,995	100.0	43.0	39.2	15.0	2.7	9.0	1.1
Leather and its manufactures.....	1,166,259	100.0	19.0	22.0	14.5	2.5	38.8	2.2
Stone, clay, and glass products.....	625,533	100.0	26.5	34.1	19.5	1.2	14.5	3.2
Iron and steel and their products.....	3,432,039	100.0	10.8	66.6	14.2	2	5.3	1.4
Nonferrous metals and their products.....	1,640,241	100.0	9.8	50.0	13.0	2	7.1	1.9
Machinery.....	3,242,389	100.0	20.1	48.8	22.2	1.6	6.2	1.6
Transportation equipment, air, land, and water.....	3,913,924	100.0	19.2	22.2	28.2	4	31.3	1.7
Miscellaneous.....	2,703,684	100.0	6.7	12.3	62.9	8	15.7	1.8

Source: Bureau of the Census; Census of Business 1935; Distribution of Manufacturers' Sales, table B, p. 21, used as basis for distribution of \$38,212,859,000, or 87.2 percent of the total sales reported.

Of the total of 134,392 manufacturing plants, only 53,623 with total net sales of \$21,418,000,000 reported on both elements of distribution expense (distribution pay roll and other distribution expense). These 53,623 plants had an expense ratio of 9.4 percent, divided into 4.1 percent distribution pay roll and 5.3 percent other distribution expenses. It will be observed from table 5 that chemicals and allied products, with 15.2 percent; stone, clay, and glass products, with 11.7 percent; machinery, with 11.7 percent; and forest products, with 11.4 percent, had the largest total distribution expenses in 1935.

Transportation equipment, air, land, and water, with 3.2 percent; products of petroleum and coal, with 7.4 percent, and rubber products with 7.8 percent, re-

ported the lowest distribution expense. In practically every instance, with the exception of textiles and their products, and printing and publishing, distribution pay roll was the lesser of the two reported expenses.

Employees Engaged in Distribution.

While it was difficult in some cases for the manufacturers reporting to separate employees engaged in production and those engaged in distribution, it is possible to ascertain a measurement of number of employees engaged in such activity for purposes of general comparison by industries. Included in the distribution expenses of the 53,623 plants is a total of \$882,953,000 paid to 523,623 full-time and part-time officers and employees who devoted all or a major portion of their time to distribution activities.

Table 3.—Percentage of Plants Selling Exclusively Through Various Distribution Channels, by Industry Groups

Industry group	Wholesale branches		Industrial users		Wholesalers and jobbers		Own retail stores		Retailers		Household consumers		Through agents, etc.	
	Total number	Percent selling exclusively	Total number	Percent selling exclusively	Total number	Percent selling exclusively	Total number	Percent selling exclusively	Total number	Percent selling exclusively	Total number	Percent selling exclusively	Total number	Percent selling exclusively
All industries.....	6,180	45.7	42,689	54.4	47,102	42.6	7,135	42.4	52,743	43.1	30,963	41.5	17,919	24.1
Food and kindred products.....	2,329	40.7	4,492	14.4	14,072	40.5	4,821	43.2	23,410	38.2	20,788	44.3	4,370	32.2
Textiles and their products.....	633	58.3	2,347	13.2	6,056	52.5	284	58.2	9,079	71.3	1,243	40.3	2,847	32.3
Forest products.....	354	39.7	6,355	25.6	6,271	62.7	293	33.6	4,034	45.6	2,910	34.4	2,548	38.4
Paper and allied products.....	115	45.2	1,770	46.6	1,236	38.7	—	—	874	26.5	33	12.1	277	7.9
Printing and publishing.....	—	—	83	47.3	38	13.2	—	—	44	20.5	23	13.0	3	33.3
Chemicals and allied products.....	329	60.1	2,593	42.1	3,265	33.0	150	28.3	2,460	22.8	1,129	23.4	1,326	15.7
Products of petroleum and coal.....	239	28.6	304	24.3	330	30.9	60	1.5	145	17.0	107	5.8	110	17.3
Rubber products.....	47	21.3	247	35.0	271	26.1	15	8.3	172	16.3	39	2.8	31	12.3
Leather and its manufactures.....	185	62.1	1,098	64.6	1,104	40.9	78	38.5	1,634	58.4	164	21.3	431	10.2
Stone, clay, and glass products.....	311	58.0	2,692	63.9	1,620	35.7	62	64.8	1,386	26.7	1,450	37.8	641	10.9
Iron and steel and their products.....	357	29.7	4,400	60.0	2,489	34.3	26	12.0	1,372	20.8	485	18.9	1,060	2.0
Nonferrous metals and their products.....	125	44.8	3,503	85.3	1,712	43.7	50	54.0	1,468	44.2	541	33.8	487	10.9
Machinery.....	496	38.3	7,055	65.0	3,449	36.4	73	23.8	1,740	21.4	688	19.6	2,072	12.0
Transportation equipment, air, land, and water.....	79	12.7	646	47.4	425	37.1	29	33.0	239	27.4	149	36.2	155	15.8
Miscellaneous.....	266	41.0	2,943	68.0	4,355	53.3	238	45.0	3,970	47.9	1,215	41.7	1,267	9.5

Source: Bureau of the Census; Census of Business 1935; Distribution of Manufacturers' Sales, table C, p. 22, with percentages shown for "selling exclusively."

Table 4.—Comparison Between Channels of Primary Distribution Used in 1935 and Those Used in 1929, by Industry Groups¹

Industry group	Total distributed sales, 1935		1935 distributed sales of industries comparable with 1929		Channels of primary distribution												Sales negotiated through agents, etc.	
					Own whole-sale branches		Industrial users		Wholesalers and jobbers		Own retail stores		Retailers		Household consumers			
	Amount (thous. of dollars)	Number plants	Amount (thous. of dollars)	Number plants	Per-cent 1935	Per-cent 1929	Per-cent 1935	Per-cent 1929	Per-cent 1935	Per-cent 1929	Per-cent 1935	Per-cent 1929	Per-cent 1935	Per-cent 1929	Per-cent 1935	Per-cent 1929		
All industries 1.....	28,175,430	184,286	26,328,269	91,438	20.6	18.0	24.0	25.8	27.3	31.3	2.2	2.4	22.8	26.6	2.4	1.8	8.3	7.4
Food and kindred products.....	6,460,989	47,992	8,084,930	40,150	31.6	24.6	7.0	6.9	28.8	31.0	3.8	3.2	33.2	29.3	6.1	4.3	14.0	12.1
Textiles and their products.....	5,823,427	16,665	1,111,290	4,679	4.8	5.6	18.9	12.0	13.3	22.4	4.1	4.6	55.3	50.8	2.0	3.4	5.9	4.9
Forest products.....	1,528,578	15,681	1,430,220	16,309	6.0	4.6	82.0	38.8	27.1	30.2	1.3	1.2	28.0	24.6	4.1	3.8	16.1	12.1
Paper and allied products.....	1,291,557	2,919	1,291,557	2,919	6.8	3.8	34.0	51.8	32.4	28.1	.....	.....	6.8	6.3	1.1	(3)	6.6	6.0
Chemicals and allied products.....	2,533,174	7,299	1,026,402	3,353	20.2	12.2	30.0	33.5	31.0	29.1	.....	.....	15.3	12.7	2.3	2.6	14.5	16.1
Petroleum and coal products.....	1,891,194	676	1,005,073	315	14.3	10.1	10.0	8.5	19.6	13.6	4.4	7.6	1.6	5.2	.....	(3)	1.3	2.4
Rubber.....	655,945	457	1,655,945	467	22.9	21.7	26.2	25.9	15.9	13.1	2.7	.....	4.0	15.6	.....	.....	2.1	2.4
Leather and its manufactures.....	1,140,250	3,380	1,054,811	2,745	20.4	21.5	18.4	14.5	16.7	25.0	2.7	3.7	41.6	35.1	.....	.....	7.3	6.1
Stones, clay, and glass products.....	694,533	5,829	577,931	2,547	24.3	4.9	31.0	86.3	18.8	40.8	.....	.....	1.0	0.2	4.1	2.7	7.4	8.3
Iron and steel and their products.....	3,552,036	6,303	2,985,447	3,480	21.3	5.9	59.8	55.8	13.4	24.1	.....	.....	4.6	3.0	.....	(7)	5.4	6.5
Nonferrous metals and their products.....	1,640,844	4,757	937,856	2,850	6.8	5.9	61.1	56.3	20.0	27.8	.....	.....	18.4	8.2	.....	1.3	6.9	4.4
Machinery.....	3,212,345	10,092	1,175,801	2,340	19.1	17.9	44.5	41.9	24.0	20.0	2.0	1.4	7.4	0.7	.....	.....	8.5	6.0
Transportation equipment.....	2,913,924	1,133	2,574,020	1,012	19.4	17.0	21.8	24.8	26.3	27.5	.....	.....	31.4	26.1	.....	.....	.....	1.0
Miscellaneous.....	2,208,034	10,682	1,705,432	7,419	4.4	5.0	8.8	9.0	72.5	67.0	.....	.....	13.9	14.8	1.0	2.7	2.6	2.7

¹ Table limited to industries which are directly comparable in 1935 and 1929.² The printing and publishing industry is omitted from this table.³ Less than 1/10 of 1 percent.

Source: Bureau of the Census; Census of Business 1935; Distribution of Manufacturers' Sales, table A, p. 20.

In some cases a wide variation was found to exist in distribution expenses between the major industry groups and also between different industry classifications within the same major industry group. This is natural perhaps, not only because of the wide divergence in selling methods employed by different industries but also because of the far-reaching changes that have been and are still taking place in the channels of distribution in many fields.

No attempt has been made in the survey of Distribution of Manufacturers' Sales to explain the reasons, aside from the limitation of the data, for these variations or to arrive at any conclusions as to what relation should exist between the cost of distribution and sales volume for any particular industry group or industry classification. The aim has been rather to present the facts as they exist in as simple and concise a manner as possible.

The value to be derived from the survey of Distribution of Manufacturers' Sales, Census of Business 1935, is not particularly from tables which are presented for 16 industry groups but rather from the tables presenting the data in detail for each of the 315 industry classifications. For the latter purpose it should be of value to management and financial executives. This holds true not only of the tables which show the flow of manufactured goods through channels of primary distribu-

tion, but also of the distribution expenses of each of the 315 industries as reported by the business census.

Table 5.—Summary of Distribution Expenses, by Industry Groups

Industry group	Number of plants reporting	1935 sales (millions of dollars)	Total distribution expenses		Distribution pay roll		Other distribution expenses	
			Amount (millions of dollars)	Percent of sales	Amount (millions of dollars)	Percent of sales	Amount (millions of dollars)	Percent of sales
All industries.....	53,623	21,418	2,007	9.4	863	4.1	1,124	5.3
Food and kindred products.....	17,735	8,313	590	7.1	261	3.1	329	3.9
Textiles and their products.....	3,197	2,853	249	8.7	123	4.3	126	4.3
Forest products.....	3,310	871	100	11.5	45	5.2	55	6.3
Paper and allied products.....	1,353	708	63	8.9	31	4.0	32	4.5
Printing and publishing.....	13	7	(1)	8.6	(1)	8.0	(1)	2.8
Chemicals and allied products.....	3,071	1,137	172	15.2	67	5.9	105	9.3
Products of petroleum and coal.....	240	377	21	5.6	7	1.8	14	3.7
Rubber products.....	230	318	40	12.6	14	4.4	26	8.2
Leather and its manufactures.....	1,860	585	54	9.2	26	4.4	27	4.6
Stones, clay, and glass products.....	1,044	273	45	16.5	21	7.7	24	8.7
Iron and steel and their products.....	2,041	1,407	130	9.3	68	4.8	70	4.9
Nonferrous metals and their products.....	1,009	449	68	15.1	28	6.2	40	8.9
Machinery.....	4,721	2,257	204	9.0	110	4.9	153	6.8
Transportation equipment, air, land, and water.....	540	1,963	94	4.8	24	1.2	70	3.5
Miscellaneous.....	4,550	1,233	150	12.2	57	4.7	93	7.5

¹ Less than \$1,000,000. Total distribution expenses were \$352,000.

Source: Bureau of the Census; Census of Business 1935; Distribution of Manufacturers' Sales, table D, p. 24.